

**AMENDMENTS TO THE CLAIMS**

**IN THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application. Please amend the claims as follows.

1-5. (Canceled)

6. (Withdrawn) A method of producing a food product comprised of a biologically pure culture of a cyanobacterium strain belonging to the genus *Nostoc*, wherein said method comprises:

- a) crushing a *Nostoc* colony to generate a crushed *Nostoc* colony,
- b) spreading said crushed *Nostoc* colony onto an agar plate,
- c) illuminating said agar plate containing said *Nostoc* colony with fluorescent light,
- d) transferring said *Nostoc* colony to a fresh agar plate,

to produce a food product comprising the biologically pure culture of *Nostoc*.

7. (Withdrawn) The method according to claim 6, further comprising

- e) repeating step d) from 1 to 3 times

8. (Withdrawn) The method according to claim 6, wherein the culture is *Nostoc commune*.

9. (Withdrawn) A method of cultivating colonies of *Nostoc* for the production of a food product comprising:

- a) generating *Nostoc* hormogonia in a growth medium,
- b) illuminating the *Nostoc* with fluorescent light,

c) spreading the illuminated *Nostoc* microcolonies on an agar plate to generate *Nostoc* microcolonies,  
cultivating the microcolonies of *Nostoc*.

10. (Withdrawn) The method according to claim 9, further comprising the steps:

d) transferring the microcolonies to a growth medium identical to or different from said growth medium in step a),

e) illuminating the microcolonies in the growth medium with fluorescent light to generate microcolonies of *Nostoc*,  
cultivating the microcolonies of *Nostoc*.

11. (Withdrawn) The method according to claim 9, further comprising the steps:

d) transferring the microcolonies to a growth medium identical or different to said growth medium in step a);

e) applying a fluorescent light intensity that is at least  $400 \mu\text{mol photon m}^{-2}\text{s}^{-1}$  to generate macromolecules;  
cultivating the macrocolonies of *Nostoc*.

12. (Withdrawn) The method according to claim 10, further comprising bubbling the microcolonies in the liquid growth medium that is identical of different from the growth medium in step a) with  $\text{CO}_2$ .

13. (Withdrawn) The method according to claim 9, wherein the colonies are *Nostoc commune*.

14. (Withdrawn) The method according to claim 11, further comprising bubbling the microcolonies in the liquid growth medium that is identical or different from the growth medium in step a) with  $\text{CO}_2$ .

15. (Withdrawn) The method according to claim 13, wherein at least 100 ml of the liquid growth medium is used.
16. (Withdrawn) The method according to claim 13, wherein substantially all of the macrocolonies are at least about 5 mm in diameter.
17. (Withdrawn) The method according to claim 16, wherein about 80% of the colonies are at least about 10 mm in diameter.
18. (Withdrawn) The method according to claim 10, wherein the growth medium in step d) is different.
19. (Withdrawn) The method according to claim 11, wherein the growth medium in step d) is different.
20. (Withdrawn) The method according to claim 10, wherein the growth medium in step d) is identical.
21. (Withdrawn) The method according to claim 11, wherein the growth medium in step d) is identical.
- 22-40. (Canceled)
41. (Currently Amended) A food product comprising a biologically pure culture of a cyanobacterium strain belonging to the genus *Nostoc* wherein at least 80% of *Nostoc* colonies are of a uniform size between 3 mm to 5 mm.
42. (Original) The food product according to claim 41, wherein the species is *Nostoc commune*.
43. (Original) The food product according to claim 41 wherein *Nostoc* is present in an amount that is at least 50 grams.

44. (Original) The food product according to claim 42, wherein *Nostoc commune* is present in an amount that is at least 50 grams.

45. (Withdrawn) A method for promoting or enhancing health comprising administering to an individual in need of health promotion or enhancement a health promoting or enhancing amount of a food product derived from a biologically pure culture of a cyanobacterium strain belonging to the genus *Nostoc*.

46. (Withdrawn) The method according to claim 45, wherein the *Nostoc* strain is *Nostoc commune*.

47-51. (Canceled)

52. (Currently Amended) The food product according to claim ~~51~~ 41, wherein the average diameter of said colonies is ~~between about 3 mm and about 10 mm~~ about 4 mm.

53. (Canceled)

54. (Withdrawn) A food product comprising a biologically pure culture of a cyanobacterium strain belonging to the genus *Nostoc*, whereby said food product is made by the steps of:

- a) crushing a *Nostoc* colony to generate a crushed *Nostoc* colony,
- b) spreading said crushed *Nostoc* colony onto an agar plate,
- c) illuminating said agar plate containing said *Nostoc* colony with fluorescent light,

- d) transferring said *Nostoc* colony to a fresh agar plate,

to produce a food product comprising a biologically pure culture of *Nostoc*.

55. (Withdrawn) The food product of claim 54, wherein the culture is *Nostoc commune*.

56. (Withdrawn) A food product comprising colonies of *Nostoc*, whereby said food product is made by the steps of:

- a) generating *Nostoc* hormogonia in a growth medium,
  - b) illuminating the *Nostoc* with fluorescent light,
  - c) spreading the illuminated *Nostoc* microcolonies on an agar plate to generate *Nostoc* microcolonies,
- cultivating the microcolonies of *Nostoc*.

57. (Withdrawn) The food product of claim 56, further comprising the steps:

- d) transferring the microcolonies to a growth medium identical to or different from said growth medium in step a),
  - e) illuminating the microcolonies in the growth medium with fluorescent light to generate microcolonies of *Nostoc*,
- cultivating the microcolonies of *Nostoc*.

58. (Withdrawn) The food product of claim 56, further comprising the steps:

- d) transferring the microcolonies to a growth medium identical to or different from said growth medium in step a),
  - e) applying fluorescent light intensity that is at least  $400 \mu\text{mol photon m}^{-2}\text{s}^{-1}$  to generate macrocolonies;
- cultivating the macrocolonies of *Nostoc*.

59. (Withdrawn) The food product of claim 56, further comprising the step of bubbling the microcolonies in the liquid growth medium that is identical or different from the growth medium in step a) with  $\text{CO}_2$ .

60. (Withdrawn) The food product of claim 56, wherein the colonies are *Nostoc commune*.
61. (Withdrawn) The food product of claim 58, wherein substantially all of the macrocolonies are at least 3 mm in diameter.
62. (Withdrawn) The food product of claim 58, wherein about 80% of the colonies are at least 3 mm in diameter.
63. (Withdrawn) The food product of claim 57, wherein the growth medium in step d) is different.
64. (Withdrawn) The food product of claim 58, wherein the growth medium in step d) is different.
65. (Withdrawn) The food product of claim 57, wherein the growth medium in step d) is identical.
66. (Withdrawn) The food product of claim 58, wherein the growth medium in step d) is identical.
67. (New) The food product of claim 41, wherein the colonies of *Nostoc* comprise the monosaccharides rhamnose and fucose.
68. (New) The food product of claim 41, wherein the colonies of *Nostoc* comprise pichoproteins in amounts greater than are found in *Nostoc* colonies harvested from nature.